

**S/N Unknown**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Yong-Jun Hu

Examiner: Unknown

Serial No.: Unknown

Group Art Unit: Unknown

Filed: Herewith

Docket: 303.098US4

Title: LOW ANGLE, LOW ENERGY PHYSICAL VAPOR DEPOSITION OF  
ALLOYS

#2/A  
T. BELL.  
6.8.01

**PRELIMINARY AMENDMENT**

Box Patent Application  
Commissioner for Patents  
Washington, D.C. 20231

When the above-identified patent application is taken up for consideration, please amend the application as follows:

**In the Specification**

**On page 1, under the title, please add the following paragraph:**

— This application is a divisional of U.S. Serial No. 09/139,583 filed August 25, 1998, which is a continuation of U.S. Serial No. 08/964,575 filed November 5, 1997, now U.S. Patent 5,863,393, which is a divisional of U.S. Serial No. 08/677,659 filed July 8, 1996, now U.S. Patent 5,725,739. —

Please substitute the following paragraph that begins on Page 1, line 19 and ends on Page 2, line 5 of the Specification with the paragraph in the appendix entitled Clean Version of Specification Paragraphs. Specific amendments to this paragraph are detailed in the following marked-up paragraph:

One way in which circuit resistance is decreased is by creating low-resistance, ohmic contacts at the device level. Ohmic contacts exhibit nearly linear current-voltage characteristics in both directions of current flow. Various factors affect the type of contact which is maintained. Increasing dopant concentration in the semiconductor contact area decreases contact resistance, up to the solubility of the dopant at the temperature at which it is introduced. Unclean semiconductor surfaces (i.e., those which contain a native oxide film) increase contact resistance. Native oxides are a problem due to silicon's rapid oxidation rate when exposed to an oxygen